

ABSTRAK

Latar Belakang: Data Global tahun 2022 menunjukkan sekitar 2,3 juta bayi meninggal dalam periode neonatal (28 hari pertama kehidupan). Di Indonesia, Angka Kematian Neonatal (AKN) berdasarkan SDKI 2017 adalah 15 per 1.000 kelahiran hidup, masih di atas target RPJMN 2020–2024 sebesar 10 per 1.000. Salah satu upaya pencegahan kematian neonatal adalah pelayanan *Antenatal Care* (ANC) yang sesuai standar 10 T. Setiap komponen *Antenatal Care* (ANC) memiliki peran penting mendeteksi risiko kehamilan, kesehatan ibu dan janin, serta mempersiapkan persalinan aman untuk menurunkan risiko kematian neonatal.

Tujuan: Untuk mengetahui hubungan kelengkapan komponen *Antenatal care* (ANC) terhadap kematian neonatal di Indonesia.

Metode: Studi ini menggunakan data SDKI 2017 dengan desain kohort retrospektif. Sampel terdiri dari 15.124 ibu usia 15–49 tahun yang melahirkan anak terakhir (bukan kembar) dalam 5 tahun terakhir. Analisis dilakukan secara univariat, bivariat (regresi logistik sederhana) dengan menampilkan Odds Ratio (OR) dengan CI (95%) dan *p*-value, uji multikolinieritas, serta multivariat (regresi logistik berganda) menampilkan Adjusted Odds Ratio (AOR). Variabel bebas dalam penelitian ini adalah kelengkapan komponen *Antenatal Care* (ANC), sedangkan variabel terikat adalah kematian neonatal. Adapun variabel perancu (*confounding*) yang dikontrol dalam analisis multivariat meliputi usia ibu, pendidikan ibu, jarak kelahiran, paritas, berat badan lahir bayi, jenis kelamin bayi, frekuensi kunjungan *Antenatal Care* (ANC), *Postnatal Care* (PNC), tempat persalinan, tempat tinggal dan kuintil kekayaan.

Hasil: Kelengkapan komponen *Antenatal Care* (ANC) tidak berhubungan signifikan secara statistik terhadap kematian neonatal dengan (AOR 0,77; *p*-value= 0,267). Sebagian besar ibu hamil telah menerima komponen ANC sesuai standar namun, terdapat komponen dengan cakupan yang masih rendah seperti, pengukuran tinggi badan (68%), pemeriksaan darah (46%), dan pemeriksaan urin (35%). Komponen *Antenatal Care* (ANC) yang berhubungan signifikan secara statistik terhadap kematian neonatal adalah: skrining imunisasi TT, pengukuran tekanan darah, pengukuran berat badan, pemberian tablet Fe, dan konseling. Variabel lain yang berhubungan signifikan terhadap kematian neonatal, diantaranya frekuensi kunjungan *Antenatal Care* (ANC), berat badan lahir bayi, jenis kelamin bayi, dan usia ibu kategori (20-25 tahun).

Kesimpulan: Kelengkapan komponen *Antenatal Care* (ANC) tidak berhubungan signifikan secara statistik dengan kematian neonatal di Indonesia. Meski sebagian besar ibu hamil di Indonesia menerima komponen pemeriksaan sesuai standar, terdapat komponen yang cakupannya rendah (pengukuran tinggi badan, pemeriksaan darah dan urin). Faktor lain yang berhubungan signifikan terhadap kematian neonatal meliputi usia ibu, berat badan lahir bayi, jenis kelamin bayi, dan frekuensi kunjungan *Antenatal Care* (ANC).

Kata Kunci: Kematian neonatal, komponen *Antenatal care* (ANC), SDKI 2017

ABSTRACT

Background: Global data from 2022 indicate that approximately 2.3 million newborns died during the neonatal period (the first 28 days of life). In Indonesia, the Neonatal Mortality Rate (NMR) based on the 2017 IDHS was 15 per 1,000 live which remains above the target set by the *Rencana Pembangunan Jangka Menengah Nasional (RPJMN) 2020–2024*, which aims to reduce it to 10 per 1,000 live births. One of the key strategies to prevent neonatal death is the provision of standardized Antenatal Care (ANC), guided by the 10-T service components. Each ANC component plays a crucial role in detecting pregnancy risks, monitoring maternal and fetal health, and preparing for a safe delivery to reduce the risk of neonatal mortality.

Objective: To determine the effect of the completeness of Antenatal Care (ANC) components on neonatal mortality in Indonesia.

Methods: This study used data from the 2017 Indonesian Demographic and Health Survey (IDHS) with a retrospective cohort design. The sample included 15,124 women aged 15–49 years who gave birth to their most recent (singleton) child within the past five years. Data were analyzed using univariate analysis, bivariate analysis (simple logistic regression) presenting Odds Ratio (OR) with 95% Confidence Intervals (CI) and p-value, followed by multicollinearity testing and multivariate analysis (multiple logistic regression) to generate Adjusted Odds Ratios (AOR). The independent variable in this study was the completeness of Antenatal Care (ANC) components, while the dependent variable was neonatal mortality. Confounding variables included maternal age, maternal education, birth interval, parity, birth weight, sex of the baby, frequency of ANC visits, Postnatal Care (PNC), place of delivery, type of residence, and wealth quintile.

Results: The completeness of Antenatal care (ANC) components was not significantly associated with neonatal mortality (AOR 0.77; $p= 0.267$). Although most pregnant women received ANC services in line with the standard components, some components had low coverage such as height measurement (68%), blood examination (46%), and urine test (35%). ANC components that showed a statistically significant association with neonatal mortality included tetanus toxoid (TT) immunization screening, blood pressure measurement, weight measurement, iron tablet supplementation, and counseling. Other variables significantly associated with neonatal mortality included the frequency of ANC visits, infant birth weight, infant sex, and maternal age (20–25 years).

Conclusion: The completeness of Antenatal Care (ANC) components was not statistically associated with neonatal mortality in Indonesia. While the majority of pregnant women received ANC services in accordance with national standards, several essential components such as height measurement, blood, and urine examinations had relatively low coverage. Other factors significantly associated with neonatal mortality were maternal age, birth weight, infant sex, and the frequency of ANC visits.

Keywords: Neonatal mortality, Antenatal Care components, 2017 IDHS